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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,262	11/12/2003	Seeta Hariharan	RPS920030098US1	6863

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SAWYER LAW GROUP LLP
PO BOX 51418
PALO ALTO, CA 94303

EXAMINER
TRAN, NGHI V

ART UNIT	PAPER NUMBER
2151	

NOTIFICATION DATE	DELIVERY MODE
11/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent@sawyerlawgroup.com
nikia@sawyerlawgroup.com

Office Action Summary	Application No.	Applicant(s)	
	10/706,262	HARIHARAN ET AL.	
	Examiner	Art Unit	
	Nghi V. Tran	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-18 and 20-24* is/are pending in the application.

4a) Of the above claim(s) *3 and 19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-18 and 20-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on September 04, 2007. Claims 1, 4-17 and 21-24 have been amended. No claims have been canceled. Claims 3 and 19 have been withdrawn. Therefore, claims 1-24 are presented for further examination.

Claim Objections

2. Claim 20 is objected to because of the following informalities: "The method of claim 20" is understood as --The method of claim 17--. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-16 are rejected under 35 U.S.C. 101 because of the following reasons:

5. In claim 9, in paragraph 0048 of the specification applicant has provided evidence that applicant intends the medium to include signals as such the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim is not statutory. Energy is not a series of steps or acts and thus is

not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not combination of substances and therefor not a composition of matter.

6. Claims 10-16 are also rejected under 35 U.S.C. 101 because they are directly on independent claim 9.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin, United States Patent Application Publication Number 2006/0173989 (hereinafter Lin), in view of Paul et al., United States Patent Number 7,185,070 (hereinafter Paul).

9. With respect to claims 1, 9, and 17, Lin teaches a system for controlling packet classification behavior [= action classification specification **203b** and paragraph 0023] of a plurality of network processors [= action processor **1**, action processor **2**, and/or action processor **n**, fig.1] in a network, the network also including at least one host processor

utilizing at least one packet classification application [= policy based application **102**], the system comprising:

- a plurality of definable rules [= policies database **202**] for determining packet classification behavior in a predetermined priority sequence [= sorting network traffic into flows, paragraph 0019-0032],
- a plurality of application program interfaces (APIs) [= policy engine API **104**] communicating with the at least one packet classification application and the plurality of network processors, the plurality of APIs for communicating with the at least one packet classification application in the at least one host processor in a network processor [fig.2];
- wherein the plurality of APIs allow the at least one packet classification application to be network processor independent and to manage the packet classification behavior of the plurality of network processors in the network processor specific manner [figs.2-3], and further include a define API [= policy engine API **104**] for allowing a rule of the plurality of definable rules to be defined [paragraph 0016-0018].

However, Lin does not explicitly show a plurality of generic application program interfaces (APIs) for communicating in a network processor independent manner.

In a system for controlling packet classification, Paul suggests a plurality of generic application program interfaces (APIs) [fig.1].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Line in view of Paul by implementing a generic

APIs for communicating in a network processor independent manner because this feature allows applications communicating over a network to utilize a desired QoS level throughout the entire period of communication, independent of the processor architectures, operating systems, network architectures, and transport protocols utilized by the application [Paul, col. 2, ll. 54-67]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to access by a variety of network architectures, operating systems, processor architectures, and transport protocols, so that each can establish the desired QoS level [Paul, col. 3, ll. 7-10].

10. Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Paul, as applied to claims 1, 9, and 17 above, and further in view of Sinha, United States Patent Number 7,000,237 (hereinafter Sinha).

11. With respect to claim 2, Lin does not explicitly show wherein the plurality of generic APIs further return a null behavior for a portion of the plurality of heterogeneous network processors in which a particular function of a particular API is not supported.

In a system for controlling packet classification, Paul suggests a plurality of generic application program interfaces (APIs) [fig.1].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul by implementing a plurality of APIs because this feature allows applications communicating over a network to utilize

a desired QoS level throughout the entire period of communication, independent of the processor architectures, operating systems, network architectures, and transport protocols utilized by the application [Paul, col. 2, ll. 54-67]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to access by a variety of network architectures, operating systems, processor architectures, and transport protocols, so that each can establish the desired QoS level [Paul, col. 3, ll. 7-10].

However, Lin in view Paul does not explicitly show return a null behavior for a portion of the plurality of heterogeneous network processors in which a particular function of a particular API is not supported.

Further, in a communication system, Sinha discloses return a null behavior for a portion of the plurality of heterogeneous network processors in which a particular function of a particular API is not supported [col. 5, ll.4 through col. 6, ll. 4].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul, and further in view of Sinha by return a null behavior for a portion of the plurality of heterogeneous network processors in which a particular function of a particular API is not supported because this feature determines if the parameters are valid [Sinha, col. 5, ll. 16-17]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to indicate that registration has not occurred [Sinha, col. 5, ll. 19-20].

12. Claims 3-7, 11-15, and 19-23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lin in view of Paul, as applied to claims 1, 9, and 17 above, and further in view of Potterveld et al., United States Patent Number 5,878,431 (hereinafter Potterveld).

13. With respect to claims 3, 6, 11, 14, 19, and 22, Lin does not explicitly show wherein a plurality of rules are used in the packet classification behavior and wherein the plurality of generic APIs include a define API for allowing a rule of the plurality of rules to be defined.

In a system for controlling packet classification, Paul suggests a plurality of generic application program interfaces (APIs) [fig.1].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify LIN in view of Paul by implementing a plurality of APIs because this feature allows applications communicating over a network to utilize a desired QoS level throughout the entire period of communication, independent of the processor architectures, operating systems, network architectures, and transport protocols utilized by the application [Paul, col. 2, ll. 54-67]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to access by a variety of network architectures, operating systems, processor architectures, and transport protocols, so that each can establish the desired QoS level [Paul, col. 3, ll. 7-10].

However, Lin in view Paul does not explicitly show a purge API to allow a portion of the plurality of rules for a network processor of the plurality of heterogeneous network processors to be deleted.

Further, in a communication system, Sinha discloses allowing a rule of the plurality of rules to be defined [see abstract and col. 3, ll.13 through col. 4, ll. 15].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul, and further in view of Potterveld by allowing a rule of the plurality of rules to be defined because this feature specifies a consistent approach for the design of application programs [Potterveld, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to manage topological associations between objects [Potterveld, see abstract].

14. With respect to claims 4, 7, 12, 15, 20, and 23, Lin in view of Paul does not explicitly show wherein the define API allows a priority, a rule number, a rule type, at least one corresponding field and at least one corresponding patterns to be defined.

In a communication system, Sinha discloses wherein the define API allows a priority, a rule number, a rule type, at least one corresponding field and at least one corresponding patterns to be defined [col. 24, ll. 4-64].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul, and further in view of Potterveld by allowing a priority, a rule number, a rule type, at least on corresponding

field and at least one corresponding patterns to be defined because this feature specifies a consistent approach for the design of application programs [Potterveld, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to manage topological associations between objects [Potterveld, see abstract].

15. With respect to claim 5, Lin does not explicitly show wherein a plurality of rules are used in the packet classification behavior and wherein the plurality of generic APIs include a purge API to allow a portion of the plurality of rules for a network processor of the plurality of heterogeneous network processors to be deleted.

In a system for controlling packet classification, Paul suggests a plurality of generic application program interfaces (APIs) [fig.1].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul by implementing a plurality of APIs because this feature allows applications communicating over a network to utilize a desired QoS level throughout the entire period of communication, independent of the processor architectures, operating systems, network architectures, and transport protocols utilized by the application [Paul, col. 2, ll. 54-67]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to access by a variety of network architectures, operating systems, processor architectures, and transport protocols, so that each can establish the desired QoS level [Paul, col. 3, ll. 7-10].

However, Lin in view Paul does not explicitly show a purge API to allow a portion of the plurality of rules for a network processor of the plurality of heterogeneous network processors to be deleted.

Further, in a communication system, Sinha discloses a purge API to allow a portion of the plurality of rules for a network processor of the plurality of heterogeneous network processors to be deleted [col. 24, ll. 4-64].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lin in view of Paul, and further in view of Potterveld by allowing a portion of the plurality of rules for a network processor of the plurality of heterogeneous network processors to be deleted because this feature specifies a consistent approach for the design of application programs [Potterveld, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to manage topological associations between objects [Potterveld, see abstract].

16. Claims 8, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Paul, as applied to claims 1, 9, and 17 above, and further in view of Goode et al., United States Patent Application Publication Number 2004/0103110 (hereinafter Goode).

17. With respect to claim 8, Lin does not explicitly show wherein a plurality of rules are used in the packet classification behavior and wherein the plurality of generic APIs

include a swap API for allowing a first priority of a first rule to be swapped with a second priority of a second rule.

In a system for controlling packet classification, Paul suggests a plurality of generic application program interfaces (APIs) [fig.1].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify LIN in view of Paul by implementing a plurality of APIs because this feature allows applications communicating over a network to utilize a desired QoS level throughout the entire period of communication, independent of the processor architectures, operating systems, network architectures, and transport protocols utilized by the application [Paul, col. 2, ll. 54-67]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to access by a variety of network architectures, operating systems, processor architectures, and transport protocols, so that each can establish the desired QoS level [Paul, col. 3, ll. 7-10].

However, Lin in view Paul does not explicitly show swapping API for allowing a first priority of a first rule to be swapped with a second priority of a second rule.

Further, in a communication system, Goode discloses swapping API for allowing a first priority of a first rule to be swapped with a second priority of a second rule [paragraphs 0005-0012 and 0034-0082].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify LIN in view of Paul, and further in view of Goodel by swapping API for allowing a first priority of a first rule to be swapped with a

second priority of a second rule because this feature optimize serialization code when porting high performance applications [Goode, paragraphs 0007-0014]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to accommodate the performance related features of serialized code in complex applications [Goode, see abstract].

Response to Arguments

18. Applicant's arguments with respect to claims 1-2, 4-18, and 20-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

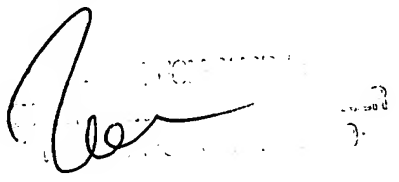
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Thursday and every other Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-396. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi Tran
Patent Examiner
Art Unit 2151



October 26, 2007